# Joining Forces

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**IN THIS ISSUE:**

We present a review of our prior articles on risk assessment and discuss two areas in medical research in which individual risk prediction is being considered.

We provide an extensive review of an article that compares three risk assessment instruments used in civilian child protective services. The article is pertinent in terms of research design and the interpretation of results.

Our readers have asked us to share information about installation programs. Ft. Dix describes their parent-teen intervention. We hope other readers will do the same.

In Grand Rounds, a fictitious FAP case is presented. You are asked to respond to eight risk assessment questions. In the next issue, we will provide an anonymous review of your responses.

## A REVIEW OF RECENT ARTICLES ON RISK ASSESSMENT

The goal of research about risk factors is to determine and understand the causes of diseases (or other events such as family violence).

We have devoted most of the last three issues of Joining Forces to risk considered from the point of view of the family advocacy program (FAP). In Volume 3, Issue 3, Dr. Dan O'Leary presented a list of risk factors for increases in partner aggression. His list included 10 behaviors or feelings (states of mind) associated with continued aggression. In that same issue was another feature on risk entitled "Risk Assessment and Family Advocacy." That article defined risk in terms of the probability of an event.

Assuming proper consideration of biases, risk factors have a probabilistic relationship to the outcome in question. It is often expressed as an odds ratio for one group (the group with the risk factor) compared to another group (one without the risk factor).

In Volume 3, Issue 4, Dr. Joel Milner continued the discussion about issues involved in risk assessment. He addressed the questions as to what kind of violence is assessed, what type of risk prediction is needed, the difference between static and non-static risk factors, marker variables, and the utility of assessing risk in one population versus another.

Volume 4, Issue 1, included an article by Drs. Richard Heyman and Amy Slep on estimating the prevalence of family maltreatment in the armed forces. Risk factors were considered in statistical models to predict the prevalence of family violence.

All of these articles considered risk from the population (group) point of view. It is generally not thought to be feasible to predict whether an individual having a given risk factor (such as smoking cigarettes) will become a case (such as developing lung cancer) because it is only a probabilistic assessment.

There are at least two areas in which recent changes in society's desire for information and the need by some people to be proactive have resulted in a direct challenge to the prediction of individual risk. The two areas are individual risk prediction for the development of breast cancer and Alzheimer's disease. Accordingly, developments in the genetic bases of these diseases have led some persons to attempt to predict their own individual risk.

*Continued on page 2*

**TABLE OF CONTENTS**

*Continued from page 1*

There are many pitfalls and problems in attempting to predict individual risk. We will not digress into these issues at the present time, but may do so in a future article.

The problem with individual risk assessment is that the prediction of risk can overestimate the probability that an individual will become a case.

Regardless of the precision or accuracy of estimates, people will make decisions based on a number of factors such as the availability of information, their own risk-taking style, and numerous personal life factors. The decision-making process in such technical medical fields as cancer and dementia usually require the individual to seek expert opinion which can be coupled with some aspect of genetic counseling. When such an individual risk assessment is conducted, at least two additional fields of study and practice come into play: risk perception and risk counseling.

Risk perception, considers an individual's level of risk. Risk counseling involves the training of the counselor in communicating risk to the individual.

Some individuals in the Army FAP are interested in the development of an instrument that will predict individual risk. FAP personnel currently make risk assessments at all stages of clinical practice as well as in the selection of targets for prevention programs. Sometimes the purpose of such programs, such as, to lower the prevalence of family violence, is unclear. A more direct approach involving risk counseling, would require the counselor to address the family violence issue directly.

An estimate of risk to a person should be a component of all FAP educational, prevention, home visitation, and clinical treatment interventions. The field of risk assessment assumes the existence of some element of risk that is somewhat under the control of the individual or the environment. Whether the risk is under the individual's control, the environment, or some combination of the two can potentially add more controversy to decisions about who manages the risk.

JOINING FORCES

Editor-in-chief
James E. McCarroll, Ph.D.
Email: jmccarroll@usuhs.mil

Editor
John H. Newby, DSW
Email: jnewby@usuhs.mil

Copy Editor
Jennifer Erk, B.A.
Email: jerk@usuhs.mil

Joining Forces is a publication of the Community and Family Support Center and the Family Violence and Trauma Project at the Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, Maryland 20814-4799.
Phone: (301) 295 - 2470

## RISK ASSESSMENT INSTRUMENT REVIEW

A recent article entitled "Risk Assessment in Child Protective Services: Consensus and Actuarial Model Reliability" in Child Welfare (Nov/Dec 1999, Vol. 78(6), p. 723-748) by Christopher Baird and Dennis Wagner reviews risk assessment procedures used in California, Washington and Michigan. Two types of risk assessment models, consensus and actuarial, are compared.

A consensus model is based on clinical judgment, in which the caseworker conducts an assessment based on known risk factors. It may or may not be based on research specific to the jurisdiction in which the estimate of risk is being prepared. An actuarial model uses longitudinal data to produce an empirically validated instrument that makes statistical predictions.

Baird and Wagner compare the reliability of decisions made with three instruments. The first two, the Washington Risk Assessment Matrix (WRAM) and the California Family Assessment Factor Analysis (CFAFA), are both consensus-based approaches. The Michigan Family Risk Assessment of Abuse and Neglect (FRAAN) is an actuarial instrument based on statistical relationships between behavior, case characteristics, and subsequent abuse and neglect.

The inter-rater reliability of the three instruments was the target of this research. The first type of inter-rater reliability was the percent agreement among

*Continued on page 3*

*Continued from page 2*

raters who had been trained on the instruments. The second type was a statistical measure of reliability, Cohen's kappa, which measures the percent agreement between each pair of raters, adjusted for chance (range between plus and minus one). The research design compared the ratings of risk in 12 teams of three people each. The 12 sites represented geographically and racially diverse urban and rural sites.

Considerable variation was found among raters in the risk levels that the raters assigned to their cases. The Michigan instrument (the FRAAN) outperformed both the California (CFAFA) and Washington (WRAM) instruments.

In the second method of measuring reliability, they computed kappas for each set of raters. An overall kappa was computed as the median value for all sets of rates for each model. They found kappas that indicated that reliabilities were above the chance level for all systems. However, the reliability was much higher for the FRAAN (.562) compared to the CFAFA (.184) and the WRAM (.180). The authors reported that kappas below .3 indicate very weak reliability while a kappa of .5 or .6 is considered acceptable for research purposes.

The authors discussed various possible reasons for the low levels of reliability of the CFAFA and the WRAM: (1) insufficient training of raters, (2) lack of accurate data in case files, and (3) the manner in which the instruments analyze factors and categorize families into risk levels (a systems problem). They concluded that the training of raters was not a problem and it was doubtful that child protective services (CPS) field staffs (compared to the trained raters in this study) represent a higher quality of raters. They concluded that the second issue, lack of data in the case files, was not a cause of the low level of reliability in the CFAFA and the WRAM. The third issue, the basic design of the systems, was a more complex problem to analyze than the first two potential problems. In the WRAM, the overall risk rating is not directly related to individual risk elements. For example, children and caregivers are rated on a number of separate elements, but there is no clearly defined relationship between these factors and the assigned overall risk level. Also, there may be problems with how each factor is rated. Assigning risk factor levels to each item distorts the real relationship between that item and subsequent caregiver behavior. For example, the CFAFA and the WRAM rate the history of caregivers as victims of abuse or neglect. However, the system requires raters to assign a current risk level to this factor rather than just determining if caregivers were abused or neglected. As a result, consistency of ratings is more likely to be adversely affected than it would be had the raters simply answered the question. In conclusion, raters using the FRAAN made more consistent risk estimates for a higher percentage of cases than raters using the CFAFA and the WRAM, whose levels of inter-rater reliability were considered inadequate.

What are the implications that the authors drew from this study? Risk assessment systems can have important effects on decisions that directly affect families. Risk assessment instruments have been used in CPS to decide whether out-of-home placement or family preservation is preferable in a given case. The authors argue that the real decision facing caseworkers is the safety of children and how the assessment of their risk (or their safety) can vary from worker to worker. These difficult decisions are often made by individuals with little training, guidance, or supervision. The authors' final point is that the decision-making system must be reliable and valid before debates over which treatment programs work or do not work.

Most FAP personnel believe that there are substantial differences between the Army FAP and civilian CPS clinical and administrative environments. The domain of the Army FAP is broader than civilian CPS agencies in terms of types of cases that are brought before a jurisdictional authority, e.g. the case review committee. The Army substantiates neglect cases that would not be considered in many civilian jurisdictions because the threat of risk is thought to be low. Additionally, the number of Army children physically injured is believed to be far less than that of children in civilian communities.

As studies of risk assessment in the Army continue, it is worthwhile to bear in mind

*Continued on page 4*

*Continued from page 3*

the study by Baird and Wagner, particularly their statement about the need to organize the assessment of risk-based research specific to a jurisdiction. Reviews of studies of civilian child and caregiver populations may be misleading if applied to the Army. There are significant differences between the military community and most civilian jurisdictions. For example, military populations are employed, screened for severe physical and mental health disabilities, have housing, and are supervised. Potentially, decision-making instruments applied to the Army FAP will only be of value when we know whether alleged risk factors influence the type and level of risk to children.

We invite our readers to share their experiences and thoughts with us about the use of formal risk assessment instruments in the Army FAP.

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## COMMON GROUND: GETTING PARENTS AND ADOLESCENTS TO WORK TOGETHER

Karen Fox, M.Ed.
Bettie Kuzmick, MSW, LCSW
Army Family Advocacy Program
Fort Dix, New Jersey

In response to concerns regarding adolescent at-risk behaviors at Fort Dix, we examined the efficacy of our program's responses to the teen population. This led to the development of a psychoeducational model, **Common Ground: Parents and Adolescents Working Together**. This program assists families with problems, such as physical violence, communication problems, or a disengaged teen or parent. Consistent with the mission of FAP, we believed that targeting parent-teen relationships would strengthen families, decrease family violence, and reduce the risk of teens engaging in destructive behavior.

Professionals often encounter families of adolescents only when there is a crisis such as running away, stealing, attempting suicide, or engaging in high-risk behaviors. Even if early assistance is requested by parents, such assistance may be limited, ineffective, or simply unavailable. **Common Ground**, a combined clinical and prevention intervention, is designed to help parents understand adolescent development, develop a relationship rather than an authoritarian approach with their teen, master communication and problem solving skills, and improve stress and anger management techniques.

The intervention focuses on the importance of finding common ground between teens and their parents. When the parent-teen bond is weak, the teen may seek connections outside of the family by involvement in groups that seem to validate the teen's sense of self worth. Sometimes these groups foster inappropriate and high risk activities such as drug and alcohol abuse, promiscuity, and violence. Parents can sometimes misinterpret their teen's behavior as a rejection of the teen's involvement with them and the family. Sometimes this struggle creates conflict resulting in negative intergenerational patterns of behavior.

**Common Ground** is a series of group and home visitation session for parents and adolescents. A pre-assessment conducted at the family's home consists of a psycho-social history of the family, a discussion of family concerns regarding the parent-teen relationship, the identification of special needs of family members, the identification of collateral professional involvement, the development of goals for the program, and a review of the program contract. The General Scale of the Family Assessment Measure (FAM) is administered (Skinner, 1995). It is a self-report instrument that provides quantitative indices of family attitudes, strengths, and weaknesses.

Parents meet in a group to develop an understanding of their parenting styles, challenge their own beliefs and expectations, and assess changes that would help meet parenting and relationship goals with their teen. Parents and teens then meet together for additional work and focus on developing concrete skills such as communication, problem solving, relationship building, reducing conflict, and fostering cooperation. Home visits are conducted during the series to reinforce skills, to support the family's efforts, and to monitor each family's progress. Goals are reviewed with the family on an ongoing basis.

Preliminary program evaluations by parents and teens, using the FAM and a satisfaction survey, have confirmed an

*Continued on page 5*

*Continued from page 4*

increase in knowledge about adolescence, significant changes in parenting behavior, and increased flexibility in parenting styles. Additionally, improved communication and problem solving skills seemed to minimize conflict, anger, and acting out behavior by teens. Further efforts to evaluate the effectiveness of **Common Ground** are ongoing.

For more information about references and models used for **Common Ground**, contact Karen Fox or Bettie Kuzmick at Fort Dix, New Jersey. The telephone number is (609) 562-5200.

Reference:
Skinner, Harvey, A., et al, Family Assessment Measure, Version III, Multi-Health Systems, Inc., 1995.

## GRAND ROUNDS: A CASE PRESENTATION

In this edition of Joining Forces we are introducing a case discussion feature. The purpose of this feature is to foster dialog about family violence cases among FAP personnel. A fictitious family advocacy scenario is presented below and FAP personnel are asked to respond to questions about it. Selected responses will be published in a subsequent edition of Joining Forces. To facilitate candid discussion and increase participation, no identifying individual or installation information will be noted.

### The Doe Family
(This is a fictitious scenario)

SSG Doe joined the Army believing that it would provide job security, health care, housing, and other benefits. Prior to the Army, Mrs. Doe worked as an administrative assistant. She agreed to SSG Doe's decision to join the Army believing that she would not have difficulty finding work. She was pregnant at the time and the family had no health insurance.

The Does have been at Fort Dunkin two years. SSG Doe recently returned from an overseas deployment where he was able to earn some extra money. Mrs. Doe used the money to pay down bills and buy a used car. Because of her excellent administrative and clerical skills she was able to get a part-time job in a convenience store. She is frequently asked to work overtime to assist her boss with the bookkeeping. SSG Doe has mixed feeling about the overtime. He is grateful for the additional income but thinks that Mrs. Doe is becoming too independent. He is also uncomfortable about the amount of time Mrs. Doe spends with her boss who is rumored to be a womanizer. The Does have two children, Andrew (age 7) and Brenda (age 9). Brenda has cerebral palsy.

SSG Doe is detailed to work as an acting platoon sergeant. His working hours increase and he is under pressure to get the platoon ready for an upcoming deployment to Eastern Europe. He used to get home around 1830. Now it is rare that he leaves work before 2100. Feeling a bit stressed-out, SSG Doe usually stops by the NCO club for a few drinks before going home. He missed one 0600 formation because of being "hung-over."

On a training holiday, SSG Doe spends the day watching television and drinking beer. That evening, Andrew and Brenda get into an argument and fight over a video game. SSG Doe yells at them, turns off the game, and says that neither can play the game again for one week. Brenda starts crying and yells that SSG Doe should not punish her since Andrew was the one who started the fight. SSG Doe pushes Brenda, who looses her balance and hits her face on the coffee table. When SSG Doe notices that she is bleeding, he gets a towel and tries to stop the bleeding. Seeing the blood, Andrew starts screaming.

SSG Doe attempts to call Mrs. Doe but the phone is busy. He leaves the quarters en route to get Mrs. Doe to come home from the convenience store. When SSG Doe tells Mrs. Doe what happened, she jokingly responds: "you mean you are in charge of an entire platoon, and can't manage two children." Her boss overhears the comment and laughs. SSG Doe tells him to mind his own (curse word) business. SSG Doe grabs Mrs. Doe's arm and insists that she leave "right now." She tells SSG Doe that she will get off in 45 minutes and will come directly home. Angrily, SSG Doe yells, "I want you home now, not later." He starts pulling her towards the door. She tells him that she has to close out her register and get her purse. When

*Continued on page 6*

*Continued from page 5*

she pulls away, SSG Doe slaps her and starts shoving her towards the door. Mrs. Doe screams for him to stop but he continues to shove her. Mrs. Doe's boss calls the MPs to let them know what happened and expresses his fear that the physical altercation may worsen when the Does get home. The MPs go immediately to SSG Doe's quarters and find that Andrew and Brenda are home alone at 2245. They also notice that Brenda's face is bruised and swollen. When asked what happened she says that she fell after being pushed by her father. The MPs interpret Brenda's explanation as a cover up for actually being hit by SSG Doe.

After interviewing SSG and Mrs. Doe, the MPs notify SSG Doe's unit. The blotter identifies the situation as one involving child abuse, spouse abuse, and neglect. They also report that SSG Doe smelled of alcohol. Brenda is taken to the emergency room because it appears as if she may need a few stitches to close a cut on her cheek. Mrs. Doe does not require any medical attention. The on-call social worker makes an assessment of the family in the emergency room. He does not think that SSG Doe should be confined to the barracks and gives him an appointment at social work service for the next morning. Mrs. Doe suggests that SSG Doe also have a medical check-up because of sleeplessness and weight loss. He has also expressed feelings of guilt about joining the Army. The family is referred to the Army Family Advocacy Program and a call is made to child protective services.

Questions:

1. Are there any particular strengths that you can identify in the Doe family?
2. What are the possible sources of stress or risk factors that you observe within the Doe family?
3. From your assessment of the Doe family, what type of problem(s) are you dealing with? Is there anything from the research literature on family violence that would help in your assessment of the Doe family?
4. What theoretical approach will you use to guide your intervention with the Doe family?
5. What would be the nature of your conversation with SSG Doe's unit commander?
6. What type of specific treatment would you recommend for the Doe family?
7. What is your rationale for the recommended treatment?
8. Do you concur or nonconcur with the social worker's decision to not have SSG Doe confined to the barracks?

Please forward your responses to: Dr. John Newby, Family Violence and Trauma Project, Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, Maryland 20814. We will review all submissions and remove all identifying information from them before publishing comments in an upcoming edition of Joining Forces. To appear in the next edition, we must receive responses no later than 30 March 2000. If you have any questions, or would like to send an electronic response, our E-mail addresses and telephone numbers are listed in the editor's box on page 2.

## APPROVAL REQUIREMENTS FOR FAMILY ADVOCACY RESEARCH

The Family Advocacy Research Subcommittee (FARS) must approve all research or studies conducted by and for the Department of the Army involving violence in families or within personal relationships that involve military personnel.

All proposals and protocols for studies and research projects involving human participants involved in family advocacy issues; e.g., physical, emotional, and psychological spouse/child abuse must be routed through Headquarters, U.S. Army Medical Command, ATTN: MCHO-CL-H, 2050 Worth Road, Suite 10, Fort Sam Houston, TX 78234-6010, to Commander, Community and Family Support Center, ATTN: CFSC-FS-A, 4700 King Street, Alexandria, VA 22302-4418

Submissions to the FARS must include written review from the U.S. Army Medical Department Center and School, Clinical Investigative Regulatory Office and written local approval of the Institutional Review Board (at the relevant US. Army Medical Center).

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